



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF REHABILITATIVE MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY
END OF TRIMESTER EXAMINATIONS JAN to APRIL 2025

UNIT CODE: PHT 234

UNIT NAME: PRINCIPLES OF NUTRITION (Special exam)

DATE: 14th April 2025

TIME: 11.15am-1.15pm

INSTRUCTIONS

- 1. All students will have two (2) hours to complete the examination**
- 2. Attempt all questions as per the instruction**
- 3. It is the student's responsibility to report any page and number missing in this paper.**
- 4. Check that the paper is complete**
- 5. Total number of pages is 10 including the cover.**
- 6. Read through the paper quickly before you start.**
- 7. No phones or any form of written material are allowed in the examination room**

TOTAL: _____/70

PERCENT: _____/100%

POINTS EARNED TOWARDS FINAL GRADE _____/70

PART A: MCQ ANSWER ALL QUESTIONS – 30 MARKS

1. Describe the major causes of secondary Protein Energy Malnutrition (PEM)

- A. It is caused by disorders in the gastrointestinal tract.
- B. It can be caused by infections, hyperthyroidism, trauma, burns, and other critical illnesses.
- C. It decreases appetite and impairs nutrient metabolism.
- D. All the above

2. Which of the following statements is true?

- A. Saturated fats are fats that are typically liquid at room temperature and are found in animal products such as meat, dairy products and eggs.
- B. Saturated fats are fats that are typically solid at all temperatures and are found in animal products such as meat, dairy products and eggs.
- C. Saturated fats are fats that are typically solid at room temperature and are found in animal products such as meat, dairy products and eggs.
- D. Saturated fats are fats that are typically both solid and liquid at room temperature and are found in animal products such as meat, dairy products and eggs.

3. Which of these is required on food labels?

- A. total carbohydrate
- B. sugars
- C. iron
- D. all of the above

4. Amylases in saliva begin the breakdown of carbohydrates into _____.

- A. Fatty Acids
- B. Simple Sugars
- C. Polypeptides
- D. Amino Acids

5. Water soluble vitamins include

- A. Ascorbic Acid
- B. Vitamin D
- C. Carotenoid
- D. None of the above

6. Deficiency of vitamin D lead to In children

- A. Bleeding gums
- B. Rickets
- C. Scurvy
- D. Pale skin

7. Onions, broccoli, fresh fruits, milk, eggs, and iodized salt are good sources of _____.

- A. Phosphorus
- B. Sodium
- C. Iodine
- D. Both (b) and (c)

8. Food passes through the stomach directly by _____.

- A. The small intestine
- B. The heart
- C. The large intestine
- D. The pancreas

9. A mineral that the body needs to work properly is _____.

- A Calcium
- B Silver
- C Gold
- D Lead

10. According to the food pyramid, a person should obtain most of their fat from _____.

- A beef, chicken, and fish
- B vegetables oils, nuts, and fish

C fats, oils, and sweets

D milk, yogurt, and cheese

11. _____ Is a unit of energy that indicates the amount of energy contained in food.

A Nutrient

B Starch

C Calorie

D Cholesterol

12. How many servings of vegetables do we need each day?

A C 3-5

6-11

B 2-3

D 1-2

13. Which of the following has the highest calorific value?

A Carbohydrates

B Fats

C Proteins

D Vitamins

14. Milk, cheese and eggs are the sources of

A. Vitamin C and A

B. Vitamin A and D

C. Vitamin C and D

D. Vitamin B and C

15. Washing of peeled vegetables removes vitamin?

A. E

B. D

C. C

D. B

16. Citrus fruits are an excellent source of _____?

A calcium

B vitamin c

C vitamin B

D Vitamin A

17. Which of the following nutrients is needed to build and maintain the structural components of the body?

A Carbohydrates

B Protein

C Fat

D Fiber

18. Which of the following nutrients is known as the sunshine vitamin?

A Vitamin C

B Vitamin A

C Vitamin K

D Vitamin D

19. Which of the following is NOT considered a nutrient?

A Vitamins

B Minerals

C Fiber

D Fats

20. About half of your diet should be made up of _____.

- A Grains and Vegetables
- B Fruits and Milk
- C Milk and Cheese
- D Fats and Sugars

21. Which of the following food constituents is not digested but is still important for our body?

- A. vitamins
- B. minerals
- C. proteins
- D. fiber

22. Sweetex used by the diabetic patients has energy content of?

- A Five calories
- B Ten calories
- C Hundred calories
- D Zero calorie

23. Fucoxanthin is a unique compound found in brown seaweed and has been shown to have

- A. Anti -Obesity & Anti-inflammatory effects
- B. Stamina effects
- C. Weight gain effects
- D. None of the above

24. All of the following are nutrients found in food except _____.

- A plasma
- B proteins
- C carbohydrates
- D vitamins

25. A diet high in saturated fats can be linked to which of the following?

- A Kidney failure
- B Bulimia
- C Anorexia
- D Cardiovascular disease

26. Your body needs vitamins and minerals because _____.

- A They give the body energy
- B They help carry out metabolic reactions
- C They insulate the body's organs
- D They withdraw heat from the body

27. This food group is our body's best source of energy?

- A Meat group
- B Fats, Oils and Sweets
- C Breads and Cereals
- D Milk and Cheese

28. Which of these is added to the food label because people sometimes do not eat ENOUGH of this?

- A Fat
- B Calcium
- C Sodium
- D Cholesterol

29. The bread, cereal, rice and pasta group is a good source of _____?

- A carbohydrate
- B vitamin C

C calcium

D vitamin D

30. Foods from the meat, poultry, fish dry beans, eggs and nuts group are an important source of _____?

A. Iron

B. Fiber

C. Beta Carotene

D. Calcium

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PART B: ANSWER ALL QUESTIONS - 10 MARKS

- 1) What is the difference between type 1 and type 2 diabetes – (2 Marks)

- 2) Explain how to check for anaemia symptoms in pregnant women (2 Marks)

- 3) Briefly describe nutritional barriers for people with HIV – (4marks)

- 4) When taking blood pressure, the result is given as Systolic and Diastolic. Explain what the two words mean? (2 Marks)

PART C: PICK YOUR BEST THREE QUESTIONS 10 MARKS – EACH QUESTION CARRIES 10 MARKS

- 1a). What do you understand by the term syndrome? **(1 Mark)**
- 2b). Refeeding syndrome can manifest in a variety of ways. The most common forms are the following acute deficiencies. Discuss the following using relevant examples **(9 Marks)**
- i. Phosphate deficiency
 - ii. Body-fluid disturbances
 - iii. Magnesium deficiency
- 2). You have been assigned to talk to mothers at Elite maternal care clinic many of whom have raised concern about weight gain during pregnancy with many complaining that the weight makes them look unattractive and therefore would like an exercise program introduced at the facility. Discuss in details your presentation for these mothers. **(10 Marks)**.
- 3a) Define the term safety margin **(1 Mark)**
- 3b) Illustrate the differences between macronutrients and micronutrients **(4 Marks)**
- 3c) Distinguish and explain the functions of high-density lipoproteins (HDL) and low-density lipoproteins (LDL). **(5 Marks)**.
- 4). You have been invited to a workshop to present on the key factors that make up a healthy diet for children and adolescents. Discuss five key barriers to nutrition for adolescents **(10 Marks)**

END!